# mobile GT MARCHITECTURE FOR DRIVER INFORMATION SYSTEMS

mobile  $GT^{\text{TM}}$  Architecture from Motorola enables a superior automotive driver information systems solution quickly and easily.

- Open architecture is enabled by a flexible, scaleable and modular computing platform, utilizing industry standard APIs
- Provides integration of hardware platform, real-time operating system, Java<sup>™</sup> virtual machine, LCD display and software drivers to speed application development
- Flexible graphical user interface creates highly adaptable "look-and-feel"
- Integrates a wide array of third party hardware and software solutions
- "One stop shopping" from Motorola through bundled software licenses of key third party suppliers



Since today's consumers expect to be connected with their information resources no matter where they are, the need to equip vehicles with comprehensive driver information systems is rapidly increasing. By definition, driver information systems provide consumers with integrated capabilities for everything from cellular communications, paging and Internet access, to navigation, multimedia and infotainment. Leveraging its recognized automotive microcontroller expertise and leadership in wireless connectivity, Motorola has developed the only comprehensive platform for driver information systems available today: mobile  $GT^{\mathbb{M}}$ .

#### **DRIVER INFORMATION SYSTEMS**



## Unique mobile computing platform

mobile GT is a flexible, modular platform that enables automakers to easily and cost-effectively develop driver information systems. With its open architecture, this mobile computing platform accommodates



a wide range of products and enables manufacturers to personalize the consumers' driving experience with easily scaleable features. Using an established architecture, automakers can develop tailored products while benefiting from economies of scale that reduce product and development costs.

Considering that automakers rely on Motorola silicon by more than 3 to 1 for their microcontroller needs, Motorola's thorough understanding of the automotive market's unique requirements is clear. Motorola's mobile GT platform capitalizes on this automotive expertise to provide a reliable way to extend the capabilities of in-car systems. The open architecture also ensures that OEMs and suppliers maximize flexibility and maintain control over their system solutions. Always sensitive to automaker concerns about time-tomarket, liability, market share, and customer satisfaction, Motorola now extends its leadership stance serving the automotive market with the mobile GT platform.

#### World-class platform partners

Since mobile GT makes integration possible for all types of driver information systems technologies, the market for supporting software applications is dramatically expanding. To facilitate that growth and provide more comprehensive customer solutions, Motorola has teamed up with several industry leaders to create the mobile GT Platform Development Environment (PDE). The mobile *GT* PDE incorporates Neutrino<sup>®</sup>, a real-time operating system from QNX<sup>®</sup> Software Systems Ltd., and the J9 Java Virtual Machine from IBM<sup>®</sup>. The PDE also includes an automotive-specific hardware computing platform, the RPX-Lite from Embedded Planet (formerly RPCG), based on Motorola's PowerPC<sup>™</sup> for the MPC823e microcontroller. Development tools are available for this platform from IBM and QNX. Through the combined expertise of this alliance, automakers can further speed the development time for a mobile *GT* driver information system.

### Third party ISV support

Using the mobile *GT* mobile computing platform, application modules are seamlessly integrated to provide the technologies needed for a complete system solution. These modules are being developed by Independent Software Vendors (ISVs) and offer a wide range of applications to support the mobile *GT* platform. The applications can include navigation, global positioning systems, natural language speech, automotive-specific object libraries, wireless connectivity, car audio and data storage, as well as many others.

#### **Distinct automaker benefits**

Motorola's mobile *GT* provides automakers with a profitable way to personalize the driving experience and meet consumers' growing need for complete driver information systems.

- Flexible, modular and scaleable open system architecture
- Outstanding product differentiator and competitive advantage
- Fast time-to-market
- Flexible "look-and-feel" maintained by OEMs
- Java application support
- Reliable technology from the automotive semiconductor leader

#### **Discover the future on-line**

To learn more about mobile *GT* solutions using DigitalDNA<sup>™</sup> from Motorola, visit the Motorola Transportation Systems Group at www.mot-sps.com/automotive/ mobilegt



### www.mot-sps.com/automotive/mobilegt

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